

WRITTEN STATEMENT

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BEFORE THE U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE AND TECHNOLOGY
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT

PANEL DISCUSSION ON
THE ROLE OF FOREST PRODUCTS IN SOLVING THE NATION'S ENERGY AND
CLIMATE CHANGES

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On behalf of Commissioner of Public Lands, Peter Goldmark, and the Washington State Department of Natural Resources, I would like to extend our thanks to Chairman Baird for focusing needed attention on the role of forest products in solving the nation's energy and climate changes. Commissioner Goldmark believes that renewable forest biomass has a significant role to play in managing Washington's forest resources more sustainably, improving forest health, strengthening and maintaining forest products manufacturing infrastructure in our communities, providing jobs, and protecting the state's working forest land base.

The DNR is a land manager on 2.1 million acres of forested state uplands, which generate revenue for public school, university, and county trust beneficiaries. Since 1970, these lands have generated \$6 billion for trust beneficiaries. The agency is also responsible for protecting public resources by regulating forest practices, preventing and suppressing wildfires, providing management assistance to forest landowners, and improving forest health on the 12.7 million acres of non-federal forestlands in Washington. Finally, as an independently elected statewide official, the Commissioner of Public Lands provides leadership on key forestry and environmental policy issues, many with broad effects for all forestlands in the state. Sustainable forest biomass utilization is one such issue, and the Commissioner is committed to realizing its full potential.

Role of State Government

State government, and specifically DNR, can serve as a catalyst to forest biomass utilization in a number of important respects. Most directly, the DNR is a supplier of forest biomass material and has broad statutory authority to construct long-term supply agreements where it is in the best interests of the trusts.

Because maintaining a working forest landscape and protecting forest health is important to the DNR, the agency has an interest in convening diverse forest biomass suppliers to explore opportunities for quantifying available biomass resources and addressing the supply uncertainty

that is often cited as constraining investor commitments. Such discussions should also provide a venue for airing and helping resolve utilization barriers related to demand, incentives and technology. This sort of initiative is critical to real problem-solving at the local level, and should also provide a helpful link between individual projects and applicable federal incentives and programs.

The DNR also initiates or supports efforts in the state legislature and other venues for improving biomass utilization incentives, allocating resources to additional research and development questions, or other opportunities to address utilization barriers. By participating in cooperative efforts with Washington's research institutions, the Governor's Office, the State Department of Community, Trade and Economic Development (CTED), the forest industry, and conservation groups, the DNR is helping to leverage ongoing renewable forest biomass utilization initiatives.

State Laws, Incentives, and Initiatives

Perhaps the most significant provision of Washington State law affecting forest biomass demand is the Energy Independence Act (Chapter 19.285 RCW), more commonly known as Initiated Measure 937 (I-937). This ballot initiative instituted a state renewable energy standard that requires large energy producers to obtain fifteen percent of their electricity from new renewable resources by 2020. With a few exceptions, forest biomass is generally considered an eligible renewable source of energy under the law. Although discussions continue about the schedule of implementation, companies are currently required to obtain three percent from renewable sources by 2012, nine percent by 2015, and fifteen percent by 2020. As energy producers look to meet these production goals, demand should increase for forest biomass feedstocks.

A recent legislative initiative of Commissioner Goldmark's seeks to call closer attention to forest biomass opportunities and challenges in Washington. Should the measure be signed into law, the Commissioner's biomass initiative legislation (HB 2165/SB 5979) would authorize DNR to conduct two biomass demonstration pilot projects, one east and one west of the crest of the Cascade Mountains. The purpose of the effort is two-fold. The first is simply to make it known that forest biomass is a priority of the DNR. The second, and the means of accomplishing the first purpose, is to use each of the pilot projects to identify and overcome the impediments to developing a forest biomass energy economy in the project area.

More specifically, the pilot projects are to inventory the level of interest and available technologies for biomass harvest and marketing, help marry-up supply-side and demand-side considerations, and where appropriate and available, showcase technologies on the cusp of commercial viability. Forest landowners, forest products manufacturers, local governments, state and federal land managers and agencies, conservation groups, labor organizations, investors, and other parties integral to building successful biomass utilization ventures have all indicated a strong interest in actively participating with the pilot projects.

An emphasis on complementing and strengthening, rather than competing with, existing forest product manufacturing infrastructure, including pulp and paper mills, is critical to the success of this effort and similar actions at all levels of government. For many years, these companies have been the original "biomass" utilization mechanism, generating revenue for DNR trust beneficiaries, helping landowners achieve their management objectives, and supporting our

communities with solid manufacturing employment. Their continued vitality is integral to sustainable forestry in our state.

Important provisions of state law that well-position DNR as a biomass supplier include two authorities, “Contract Harvesting” and “Forest Improvement Treatments,” which were made permanent by the legislature in 2007 (RCW 79.15.540). In combination, these tools allow the DNR to exchange the value of merchantable trees for the costs of performing forest improvement work, such as small-tree thinning, and tree harvesting and transportation costs. Some may be familiar with a similar concept, called “stewardship contracting,” for the US Forest Service. Forest Improvement Treatments for the DNR work much the same way, except that they must reach a break-even economic threshold whereas the Forest Service may complete revenue-deficit projects that are subsidized with federal appropriated funds. Biomass markets would be a significant advantage in Forest Improvement Treatments’ ability to accomplish DNR’s management objectives, particularly in eastern Washington where forest health and wildfire hazards threaten ecosystem and economic values.

Finally, the DNR worked with the legislature and a diverse group of stakeholders to craft, and in 2007, pass comprehensive state forest health legislation (Chapter 76.06 RCW). The law designates DNR as the state’s lead agency responsible for implementing a comprehensive program to improve forest health. A three-tiered approach was instituted. The first and primary tier is to expand voluntary, preventative efforts that help maintain forests across all land ownerships in conditions that are resilient and resistant to insects, disease and uncharacteristically severe wildfire. Options for more concerted actions, should forest health conditions worsen in a particular area, are made available in the second and third tiers.

The law recognizes the condition of healthy forest ecosystems as a shared responsibility of all forest landowners, in that at-risk conditions on one landowner’s parcel can exacerbate the spread of insects, disease, and wildfire onto neighboring forests. For this reason, DNR was also tasked with promoting cooperation between the state and the federal government on maintaining the health of entire forest landscapes, with special emphasis on federal forest lands.

Forest biomass markets are integral to removing currently low-value material from at-risk forests in an economical, efficient, and sustainable fashion. Without markets for forest products, including biomass, there is quite simply no realistic way to accomplish forest restoration objectives on-the-ground. Acknowledging the relationship between biomass markets and forest health, in passing the forest health law the legislature also funded a University of Washington Rural Technology Initiative study to quantify the amount of biomass material available from in-woods slash piles. This study adds to a lengthy and still-growing body of research on biomass availability, sustainability, technologies, and feasibility analyses that has been performed in the state.

Federal Government Cooperation Opportunities

The most immediate opportunity for federal cooperation on state forest biomass initiatives is in implementing the American Recovery and Reinvestment Act of 2009 (“stimulus” bill). Numerous state agencies and organizations, including DNR, have worked to identify “shovel-ready” biomass utilization infrastructure projects that could be funded under various avenues in

the ARRA, creating lasting economic recovery and employment benefits. The US Forest Service, for instance, was appropriated \$50 million in wood-to-energy grants under the Act, and DNR worked with CTED to identify and submit eight such projects. The US Department of Energy will also have opportunities to directly fund projects through the \$3.1 billion appropriation it received for the State Energy Program and \$6.7 billion appropriation for the Energy Efficiency & Renewable Energy Program.

In addition to funding individual biomass infrastructure projects, the ARRA can and should be used to keep people working in Washington's forests. Because of the economic downturn, there is a significant risk of permanently losing the capability and technical skills necessary to sustainably harvest forest biomass for energy production or any other purpose. Major reductions in the state's forest products manufacturing capabilities may result from the housing crisis and historic lows in lumber prices. As many areas in Washington can already bear witness, rebuilding industry infrastructure after widespread closures is largely impossible. Consequently, efforts to attract new biomass utilization operations to these areas must quite literally start from scratch. The US Forest Service received \$500 million in ARRA funds to conduct job-creating forest management projects on federal, state and private land, and these can make an important contribution to retaining the infrastructure necessary for bringing biomass-to-energy operations to fruition.

In the longer term, beginning with the FY10 appropriations cycle, funding several new programs that were passed in the Food, Conservation and Energy Act of 2008 (Farm Bill) will be important to broadening the array of clean, renewable biomass energy incentives that are available to state-level projects. Specifically, these include the Biomass Crop Assistance Program, the Biorefinery Assistance Program, the Bioenergy Program for Advanced Biofuels, and Community Wood Energy Program. The Farm Bill also contained numerous research and development provisions pertaining to second-generation biofuels and forest biomass energy, including coordinating US Department of Agriculture and US Department of Energy bioenergy efforts through a joint board and technical committees. The Farm Bill made perhaps the most complete and comprehensive effort to place forests on an equal plane with other biomass sources of any other federal policy to date.

The Commissioner's biomass initiative will undoubtedly bear out more specific challenges and opportunities for prospective energy projects in Washington State. These seem likely to include policy and fiscal issues that are interwoven among the jurisdictions of DNR, other Washington State agencies, the Washington legislature, federal agencies, and Congress. Given the state's difficult budget situation, it is reasonable to expect that the subset of pilot project work that is funding-dependent will depend heavily on federal assistance and incentives. The biomass pilot legislation requires a progress report to the legislature in December, 2010, and this represents the latest point at which specific, unresolved policy and fiscal issues would be quantified.

Federal Regulatory Barriers to Technology Development

While not directly the purview of the Committee on Science and Technology, a lynchpin in realizing the potential of forest biomass in clean, renewable energy generation is simply providing this material with fair access to federally-mandated energy markets. In the 2007 Energy Independence and Security Act, for instance, a Renewable Fuels Standard was adopted

that excluded most forest biomass from eligibility. The RFS definition of eligible forest biomass only permits material from pre-existing tree plantations, or that which may be gathered from the immediate vicinity of homes, to count toward the standard's attainment. Federal forestlands, which many in Washington acknowledge as being in sore need of active management, are almost entirely excluded.

At present, the respective U.S. House and Senate committees of jurisdiction are also considering federal renewable energy standards, similar to Washington's I-937. Securing a definition of forest biomass that includes sustainably harvested material from federal, state and private forestlands would remove a significant barrier to greater forest biomass contributions to renewable energy production.

More specifically related to technology development, the arena of advanced renewable transportation fuels from cellulosic feedstocks would greatly benefit from RFS eligibility. Gasification, pyrolysis and enzyme digestion technologies to manufacture cellulosic ethanol from forest biomass are making forward strides, and one purpose of the Commissioner's biomass initiative is to assist these and other methods in gaining traction. There is no replacement, however, for the necessity of invention afforded by market demand.

A lack of supply surety is an often-cited barrier to more widespread forest biomass investments. Capital lenders must have some assurance of payback before they are willing to finance infrastructure projects. Uncertainty surrounds the ability of federal land management agencies to produce material on a sustained, reliable basis, and some of the underlying issues can be traced back to federal law, regulation, and policy. Yet, federal agencies manage forty-four percent of the forestland in Washington. While opinions vary widely about the nature of barriers to federal land management, one thing is certain: In order to advance forest biomass technology and energy production in the state, federal forestlands must play a more significant role than they have in recent years. The DNR is committed to working through local partnerships, beginning in eastern Washington where forest health and wildfire risks are most urgent, to secure public support for the policies and resources essential to federal land managers' success.

Again, our thanks on behalf of Commissioner Goldmark for Chairman Baird's interest, hard work and energetic pursuit of forest biomass opportunities for Washington. The DNR sees great promise in partnerships among state, federal, and private entities toward forestry's future as a source of clean, renewable energy.